Amendments to the Claims:

1. (currently amended) A method of determining how the solubility of a solid compound-of-interest is affected by its form ~~during a period between the early lead optimization and clinical trials~~, which comprises:

(a) preparing an array of samples, each comprising a controlled amount of the compound-of-interest, wherein the form of the compound-of-interest in at least two of the samples is different;

(b) forming a liquid portion of each sample by adding a solvent to each sample; and

(c) determining how much compound-of-interest dissolved in the liquid portion of each sample.

2. (original) The method of claim 1, wherein:

(a) the method further comprises separating the liquid portion of each sample from any solid portion each sample may contain prior to the determination;

(b) the solid remaining in a sample after separation of its liquid portion is analyzed to determine whether any change of form occurred;

(c) the physical form of the compound-of-interest in one sample differs from the physical form of the compound-of-interest in another sample;

(d) the compound-of-interest in one sample is amorphous and the compound-of-interest in another sample is crystalline;

(e) the compound-of-interest in one sample is crystalline and has a first crystal structure and/or a first crystal habit and the compound-of-interest in another sample is crystalline and has a second crystal structure and/or a second crystal habit, wherein the second crystal structure differs from the first crystal structure and/or the second crystal habit differs from the first crystal habit;

(f) the chemical form of the compound-of-interest in one sample differs from the chemical form of the compound-of-interest in another sample;

(g) the compound-of-interest in one sample is a salt, solvate, or co-crystal of a compound and the compound-of-interest in another sample is a different salt, solvate, or co-crystal of the compound;

(h) the compound-of-interest in one sample is a compound and the compound-of-interest in another sample is a salt, solvate, or co-crystal of the compound;

(i) the amount of compound-of-interest is less than about 100 micrograms;

(j) the amount of compound-of-interest is less than about 50 micrograms; or

(k) the amount of compound-of-interest is less than about 10 micrograms.

3. (original) A method of determining how the dissolution of a solid compound-of-interest is affected by its form, which comprises:

(a) preparing an array of samples, each comprising a controlled amount of the compound-of-interest, wherein the form of the compound-of-interest in at least two of the samples is different;

(b) forming a liquid portion of each sample by adding a solvent to each sample; and

(c) determining how much compound-of-interest dissolved in the liquid portion of each sample as a function of time.

4. (currently amended) The method of claim 3, wherein:

(a) the method further comprises separating the liquid portion of each sample from any solid portion each sample may contain prior to the determination;

(b) the solid remaining in a sample after separation of its liquid portion is analyzed to determine whether any change of form occurred; ~~or~~

(c) the method further comprises:

(i) preparing a first sub-array of samples, each comprising a controlled amount of the compound-of-interest in a first form;

(ii) preparing a second sub-array of samples, each comprising a controlled amount of the compound-of-interest in a second form that differs from the first form;

(iii) forming a liquid portion of each sample in the first sub-array by adding a controlled amount of a solvent to each sample in the first sub-array at a time point that is unique to each sample in the first sub-array;

(iv) forming a liquid portion of each sample in the second sub-array by adding a controlled amount of a solvent to each sample in the second sub-array at a time point that is unique to each sample in the second sub-array but is the same as the time point at which solvent was added to a sample in the first sub-array;

(v) separating the liquid portion of each sample in the first and second sub-arrays from any solid portion each sample may contain at a time point that is the same for each sample in the first and second sub-arrays; and

(vi) determining how much compound-of-interest dissolved in the liquid portion of each sample;

(d) the physical form of the compound-of-interest in one sample differs from the physical form of the compound-of-interest in another sample;

(e) the compound-of-interest in one sample is amorphous and the compound-of-interest in another sample is crystalline;

(f) the compound-of-interest in one sample is crystalline and has a first crystal structure and/or a first crystal habit and the compound-of-interest in another sample is crystalline and has a second crystal structure and/or a second crystal habit, wherein the second crystal structure differs from the first crystal structure and/or the second crystal habit differs from the first crystal habit;

(g) the chemical form of the compound-of-interest in one sample differs from the chemical form of the compound-of-interest in another sample;

(h) the compound-of-interest in one sample is a salt, solvate, or co-crystal of a compound and the compound-of-interest in another sample is a different salt, solvate, or co-crystal of the compound;

(i) the compound -of-interest in one sample is a compound and the compound-of-interest in another sample is a salt, solvate, or co-crystal of the compound;

(j) the amount of compound -of-interest is less than about 100 micrograms;

(k) the amount of compound-of-interest is less than about 50 micrograms; or

(l) the amount of compound -of-interest is less than about 10 micrograms.

5. (original) A method of determining how the stability of a solid compound-of-interest is affected by its form, which comprises:

(a) preparing an array of samples, each comprising a controlled amount of the compound-of-interest, wherein the form of the compound-of-interest in at least two of the samples is different;

(b) exposing the compound-of-interest in each sample to a condition that may affect the stability of the compound-of-interest; and

(c) determining whether the form or chemical composition of the compound-of-interest in each sample changed.

6. (original) The method of claim 5, wherein:

(a) the condition is pH, ionic strength, counter-ion concentration, relative humidity, radiation, oxidative conditions, mechanical stress, temperature, or time;

(b) the physical form of the compound-of-interest in one sample differs from the physical form of the compound-of-interest in another sample;

(c) the compound-of-interest in one sample is amorphous and the compound-of-interest in another sample is crystalline;

(d) the compound-of-interest in one sample is crystalline and has a first crystal structure and/or a first crystal habit and the compound-of-interest in another sample is crystalline and has a second crystal structure and/or a second crystal habit, wherein the second crystal structure differs from the first crystal structure and/or the second crystal habit differs from the first crystal habit;

(e) the chemical form of the compound-of-interest in one sample differs from the chemical form of the compound-of-interest in another sample;

(f) the compound-of-interest in one sample is a salt, solvate, or co-crystal of a compound and the compound-of-interest in another sample is a different salt, solvate, or co-crystal of the compound;

(g) the compound-of-interest in one sample is a compound and the compound-of-interest in another sample is a salt, solvate, or co-crystal of the compound;

(h) the amount of compound-of-interest is less than about 100 micrograms;

(i) the amount of compound -of-interest is less than about 50 micrograms; or

(j) the amount of compound -of-interest is less than about 10 micrograms.

Claims 7-23 (canceled)